BURLINGTON PUBLIC WORKS

FY 2020 PROPOSED BUDGETS

Water

Wastewater

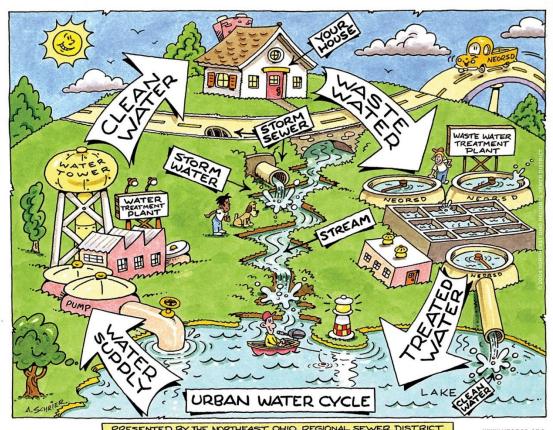
Stormwater





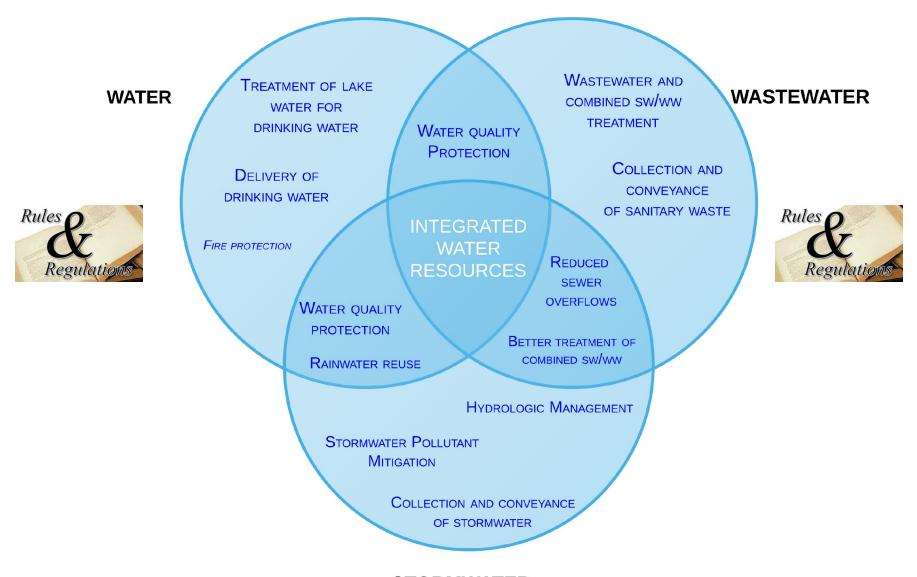
DPW MISSION STATEMENT

 We steward Burlington's infrastructure and environment by delivering efficient, effective and equitable public services.









STORMWATER







Water Resources

Providing clean water and fire protection services through

Water Supply

- Treatment of water from Lake Champlain for drinking water
- Distribution of water to homes, businesses and fire hydrants
- Maintenance of water distribution system including valves, water mains & services, fire hydrants, elevated storage tanks and reservoirs

Wastewater (Sanitary)

- Treatment of sewage from homes and business before discharge to the Winooski River and Lake Champlain
- Treatment of combined stormwater/wastewater to maximum extent practicable before discharge
- Maintenance of collection system, three treatment plants, 25 pump stations

Stormwater Management

- Collection of stormwater runoff in combined and separate storm sewers
- Regulatory review of increases in impervious surface or earth disturbances to mitigate (Chapter 26)
- Watershed Planning and Retrofit design to mitigate stormwater runoff volumes and treat pollutants before discharge to waterways





Water Resources, by the Numbers

- 1 water plant and finished water pump house
- 2 pump houses (finished water and reservoir)
- 112 miles of water mains
- 2 Reservoirs (7MG storage)
- 2 Water Towers (UVM 500,000 gallons; Redstone 150,000 gallons)
- 10,000+ water meters
- 900 fire hydrants

- 3 Wastewater Treatment Plants
- 49 miles of sanitary sewer
- 45 miles of combined sanitary / storm sewer
- 37 miles of storm sewer
- 25 pump stations
- 102 storm water outfalls
- 3200 catch basins
- 2 post-closure landfills
- 1 methane powered generating station



FY19 Water Resources Work











High Level FY'20 Budget Goals:

Advance Near Term Operational and Capital Needs

- Ensure <u>sufficient resources</u> to maintain smooth and safe water, wastewater and stormwater operations and strong regulatory compliance
 - Hire and integrate additional staff approved as part of Phase I and II staffing update
 - Leverage position enrichments (Water Resources Policy and Programs Manager and Customer Care and Finance Manager) for increased operational efficiency
- Continue increased water main capital reinvestment levels (another \$2M for CY2019) to reduce water main breaks, tap water discoloration and unplanned water service disruptions, and support pavement sustainability
- Begin the \$30 M worth of Wastewater and Stormwater investment approved by the voters on November 6, 2018
- Rehabilitate Burlington's primary high service elevated tank located on UVM property





High Level FY'20 Budget Goals:

Ensure Sustainable Utility Financial Health

- Meet debt service requirements for Water and Wastewater bonds.
- Maintain neutral or surplus oriented annual budget to support maintenance of O&M days of cash on hand near current levels while addressing meter billing customer overbilling
- Revenue assurance improvements
- Establish designated capital reserves

Plan/Invest in Long Term Capital Stability

- Hire tank asset management firm to ensure longevity of 2 elevated water storage tanks (necessary to supply water to the Hospital and hill section neighborhoods)
- Prepare 5 year capital needs plan for all of Water System (distribution, treatment and storage); shift financing source to DWSRF program (3% interest, with possible grant/subsidy)
- Finalize Integrated Water Quality Management Planning Project which will identify long term Wastewater and Stormwater investments





High Level FY'20 Budget Goals:

Rate Payer Affordability

- Balance cash financed (PayGo) capital expenditures with debt financed capital expenditures, freeing up funds for other operational or debt service needs
- Complete comprehensive rate affordability study by March 15, 2020 designed to "relieve the cost burden on income-constrained, small volume users." Scope includes:
 - Update of Water, Wastewater and Stormwater long term rate models including all anticipated debt service and known cost drivers
 - Stakeholder engagement
 - Identification of alternative revenue sources
 - Evaluation of alternative rate structures, including progressively tiered rates
 - Identification of affordability programs including discounts, rebates etc.
- As part of Integrated Planning, conduct financial capability assessment to determine level of financial burden anticipated with meeting newer Clean Water Regulations and provide basis for alternative compliance schedules





Key Drivers (revenue side)



Water/Wastewater:

- Continued loss of volumetric (usage) revenue in Water and Wastewater due to correction of additional meter billing errors uncovered by expanded meter assessment project
 - Approximately 2 million cu. ft in Water and 2.4 million cu. ft. in Wastewater
 - ~ â \$80K W, â \$140K WW

Wastewater:

 Loss of remainder of Hadley Road (South Burlington) customers (\$110,000) due to South Burlington pump station project

Stormwater:

- No major revenue drivers positive or negative
- Note, starting in FY20 tracking larger capital grants award (\$1M in Combined Sewer Stormwater Grant) outside of annual budget in capital account





Key O & M Budget Drivers (expense side)





- Personnel Additions Phase I and II (á \$391K across W, WW, SW)
- Rate Affordability Study (~\$120 \$140K across W, WW, SW)
 - Includes updates and analysis needed for Financial Capability Assessment
 - Also cost efficiency review to identify possible areas of cost savings
- Suez Tank Asset Management (\$60K)
- Biosolids (sludge) management (á \$89K WW)
- PILOT (á \$89K WW, á \$23K W)
- Enterprise à General Fund Indirect Cost Allocations (á \$31K W, flat in WW)





Key Capital Drivers (expense side)



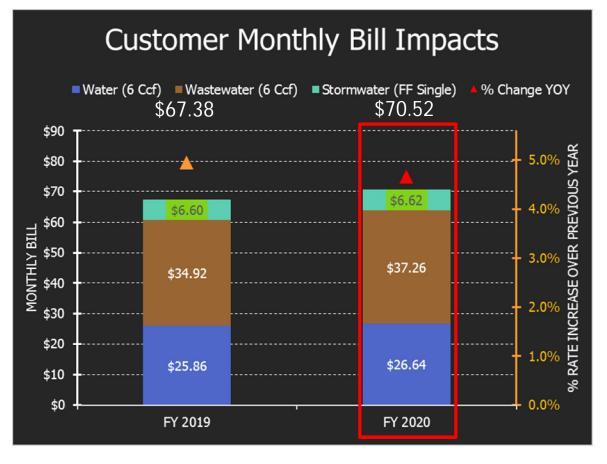


- Water Debt Service (á W)
 - Full debt load of \$2M Series 2018 and \$2M Series 2018B
 - Increase of \$180K in FY20 over FY19
 - Estimated Interest Payment for \$1 M remaining bond authorization (\$43K)
 - Full P+ I Load due in FY21 = \$80K
 - UVM Tank Rehabilitation + new FAA Beacon (\$206K)
- Equipment Purchases (Financed) Recommended by Fleet Maintenance (á W, á SW and á WW)





Proposed FY20 Water Resources Rates



Average Customer Impacts

- Bill increases over FY19
 - \$3.14/month
 - \$37.68/year
- Based in single family home using 600 cu. ft (4488 gallons)

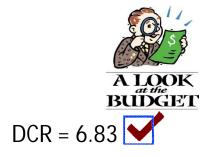
Note: Bill amounts do not include 3.5% Franchise Fee collected on Utility charges per City Charter.

- Monthly bill based on single family home with average water usage (600 cf or 4500 gallons per month)
- 4.66% increase on overall Water Resources bill



Water Resources Proposed FY'20 Budgets:

Stormwater								
	FY18 Budget	FY19 Budget	FY20 Budget	Change from FY18				
Revenues	\$1,584,222	\$1,945,581	\$1,726,882	(\$218,669)				
Expenses	\$1,605,638	\$1,934,471	\$1,708,795	(\$225,676)				
Net to Reserve	(\$21,416)	\$11,110	\$18,087					
Wastewater								
	FY 18 Budget	FY19 Budget	FY20 Budget	Change from FY18				
Revenues	\$7,825,160	\$7,931,697	\$8,160,504	\$228,807				
Expenses	\$8,040,988	\$7,926,265	\$8,127,568	\$201,303				
Net to Reserve	(\$215,828)	\$5,432	\$32,926					
Water								
	FY 18 Budget	FY19 Budget	FY20 Budget	Change from FY 19				
Revenues	\$6,678,702	\$6,912,914	\$7,605,210	\$692,296				
Expenses	\$6,684,661	\$6,880,223	\$7,582,619	\$702,396				
Net to Reserve	(\$5,959)	\$32,691	\$22,591					



DCR = 1.31



DCR = 1.67



	Estimated Cash Cash at FY18 at FY19		O&M Days Cash on Hand at FY 20	
Fund	End	End/FY20 begin	Beginning	
Stormwater	\$ 1,088,763	\$ 1,088,763	346	
Wastewater	\$ 3,013,079	\$ 2,788,079	160	
Water	\$ 3,779,636	\$ 2,938,872	194	

Leverage health cash for overbilling repayments, maintain at 90 DCOH or higher

Looking ahead to FY 21 and beyond

Challenges

- Debt Service for Clean Water Resiliency Plan
 - Repayment for FY 20 completed projects will start in FY 21 and continue until CWRP is full implemented
- Upcoming Additional Water Resources Borrowing Needs
 - Water System
 - Continued investments needed in Water Distribution System, only \$1M of 2016 \$8.34 M bond authorization remains
 - Reservoir Pump House Building (c. 1868) needs replacement
 - Reservoir Roof needs replacement (with possible solar panels)
 - Stormwater and Wastewater Systems
 - Integrated Plan targeted for completion in 2020, will likely need to seek authorization for <u>additional</u> capital for <u>new</u> water quality infrastructure by 2022/2023





Looking ahead to FY 21 and beyond *Opportunities*

- Volumetric Revenue Increases Due to Completed Development Projects
 - Revenue base for W, WW and SW <u>likely</u> to go up FY20 FY22 (usage models <u>are conservative</u>) as new developments come on line
 - Revenue Assurance Program improvements
 - Meter replacement may yield small bump in volume as older, slower meters are replaced
- Affordability Rates and Program:
 - Benefits of affordability study will be implemented in FY21
 - Possible new revenue streams
 - Remaining rate impacts will be mitigated for low volume residential user
- Water Resources continues to work hard to obtain grant funding and available loan subsidies





Summary

S Request approval of FY 20 rates

-	FY2020							
Utility	Proposed FY20 Rate	Monthly Increase for Home Owner	Monthly Cost for the Average Home Owner	Annual Increase for Home Owner	Annual Cost for the Average Home Owner	% Increase		
Stormwater	\$6.62 per month for single family homes/ \$2.48 per ISU	\$0.02	\$6.62	\$0.24	\$79.44			
Wastewater	\$6.21 per 100 cubic feet	\$2.34	\$37.26	\$28.08	\$447.12			
Water	\$4.44 per 100 cubic feet	\$0.78	\$26.64	\$9.36	\$319.68			
Total Utility		\$3.14	\$70.52	\$37.68	\$846.24	4.66%		

Does not include 3.5% franchise fee surcharge assessed on bill total per City Charter

- S Stormwater \$2.48/ISU
- S Wastewater \$6.21/100 cf
- S Water \$4.44/100 cf





Questions?











SUPPLEMENTARY INFORMATION

Detail on Clean Water Resiliency Plan and Need for High Tank Contracts



Clean Water Resiliency Plan

- First Round of Projects Authorized with May 13 BOF/Council Approval
 - Computerized Controls Update at Main Plant
 - Upgraded Disinfection Systems at all 3 Wastewater Treatment Plants
 - Flynn and Fletcher Pump Stations
 - Industrial Pre-treatment Program Development
 - Planning and Design for remaining Pump Stations and Wastewater Improvements to be implemented over next 3-4 years
- Debt Service only begins one year after completion of construction à FY21
- Awaiting whether projects will have enough "priority points" to earn pollution control grants toward construction costs
- Additional Projects already underway:
 - Repair of eroded stormwater outfalls along Manhattan Drive
 - Design and Implementation of Combined Sewer Green Stormwater Infrastructure Projects
 - City received \$1 M grant funding for CSO Green Infrastructure!





High Tank Rehabilitation

- 500K gallon water storage tank
- Supplies Hospital, UVM and higher elevation neighborhoods with water pressure
- Recent 2018 inspection showed it to be in poorer condition than previously thought
- Requires recoating to protect it from corrosion and also honor our lease with UVM
- It already has too many coats of paint, must first be sand blasted
- Unfortunately some of existing coats contain lead paint
- \$888,462 in 5 installments for rehabilitation









Recoating will require full Lead containment

